

CLAIMS

1. An aerosol dispenser comprising a body, a closure sealed to the body, and means for dispensing material from the interior of the dispenser, wherein the closure is welded ultrasonically to the body by a metal-to-metal weld.
3. An aerosol dispenser according to claim 1, wherein the metal-to-metal weld is between annular flanges on the body and closure extending circumferentially about the axis of the body and closure.
4. An aerosol dispenser according to claim 3 wherein the flanges are outwardly directed and flat.
5. An aerosol dispenser according to claim 3 wherein the flanges are axially directed and cylindrical.
6. An aerosol dispenser according to any of claims 3 to 5 wherein the flanges are welded, rolled and crimped together.
7. An aerosol dispenser according to any of claims 3 to 5, wherein one of the flanges is of greater width than the other, and wherein the outer edge portion of the wider flange forms a "U" within which the outer edge portion of the narrower flange is located, both said edge portions extending generally parallel to the adjacent wall of the body.
8. A method of assembling an aerosol dispenser comprising a metal body, a metal closure, and means for dispensing material from the interior of the dispenser, wherein the closure is welded ultrasonically to the body by a metal-to-metal seal.
9. 10. A method of assembling an aerosol dispenser according to claim 8, wherein the closure, which comprises an annular flange extending circumferentially about its axis, is positioned at the open end of and co-axially with the body, which comprises a complementary annular flange

BEST AVAILABLE COPY

extending circumferentially about its axis, such that the flanges are parallel and in contact with each other.

11.0

5

A method of assembling an aerosol dispenser according to claim 10, wherein the flanges are welded together by means of an ultrasonic welding head which is brought into communication with the flanges and moved circumferentially along the flanges to create a substantially continuous weld between the flanges until a complete revolution about the axis of the closure and body has been performed.

10

11.12.

A method of assembling an aerosol dispenser according to claim 11 wherein the said flanges are outwardly directed and flat.

12.13.

15

A method of assembling an aerosol dispenser according to claim 12, whereby the ultrasonic welding head causes relative vibration between the flanges in a direction which is radial with respect to the said axis.

13.14.

20

A method of assembling an aerosol dispenser according to claim 10, wherein the flanges are outwardly directed and flat and wherein a fixed member is placed on one side of the pair of flanges and a welding horn in the form of a ring is brought into contact with the other flange to urge the flanges together, said ring being coaxial with and of substantially the same diameter as the said flanges, and whereby the ring is vibrated at an ultrasonic frequency about its axis of rotational symmetry to weld the flanges together.

25

14.15.

A method of assembling an aerosol dispenser according to any of claims 10 to 14 wherein the flanges are bent to lie in a substantially axial direction after the flanges have been welded together.

30

15.16.

A method of assembling an aerosol dispenser according to claim 11 wherein the said flanges are axially directed and cylindrical.

BEST AVAILABLE COPY

17. A method of assembling an aerosol dispenser according to claim 16 wherein the ultrasonic welding head causes relative vibration between the flanges in an axial direction.
- 5 18. A method of assembling an aerosol dispenser according to any of claims 10 to 17 wherein one of the said flanges is of greater width than the other and after the flanges have been welded together the wider flange is rolled and crimped around the other flange.
- 10 19. A method of assembling an aerosol dispenser according to any of claims 10 to 18 wherein the flanges are rolled and crimped after they have been welded together.

add  
a27

add  
c#

BEST AVAILABLE COPY